## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: Source:	10/516, 342
	PCT
Date Processed by STIC:	01/10/2006

## ENTERED



PCT

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                     PATENT APPLICATION: US/10/516,342
                                                             TIME: 08:40:50
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      5 <110> APPLICANT: Memorial Sloan-Kettering Cancer Center
     7
             Kolesnick, Richard N.
             Xing, Hong-Mei R.
      9
    13 <120> TITLE OF INVENTION: KINASE SUPPRESSOR OF RAS INACTIVATION FOR THERAPY OF RAS
MEDIATED
              TUMORIGENESIS
    14
     18 <130> FILE REFERENCE: 1216-1-006PCT
W--> 19 US
     22 <140> CURRENT APPLICATION NUMBER: 10/516,342
     23 <141> CURRENT FILING DATE: 2004-11-30
     25 <150> PRIOR APPLICATION NUMBER: PCT/US03/16961
     26 <151> PRIOR FILING DATE: 2003-05-29
     29 <150> PRIOR APPLICATION NUMBER: 60/384,228
     31 <151> PRIOR FILING DATE: 2002-05-30
     35 <150> PRIOR APPLICATION NUMBER: 60/460,023
     37 <151> PRIOR FILING DATE: 2003-04-03
     41 <160> NUMBER OF SEQ ID NOS: 23
     45 <170> SOFTWARE: PatentIn version 3.1
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     71 <213> ORGANISM: Homo sapiens
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     78 1
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     85 Leu Glu Ala Lys Leu Val Lys Tyr Ile
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     91 <211> LENGTH: 19
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     100 ggcagtctgc gcgggctgc
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105 <211> LENGTH: 18

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202
205 Ser Arg Ala Leu Gln Gln Cys Gly Gln Leu Gln Lys Leu Ile Asp Ile
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209 Ser Ile Gly Ser Leu Arg Gly Leu Arg Thr Lys Cys Ser Val Ser Asn
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213 Asp Leu Thr Gln Gln Glu Ile Arg Thr Leu Glu Ala Lys Leu Val Lys
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	Arg	Thr	Ala	Glu 100	Leu	Asn	Ser	Tyr	Pro 105	Arg	Phe	Ser	Asp	Trp 110	Leu	Tyr
225	Ile	Phe			Arg	Pro	Glu			Gln	Glu	Ile			Glu	Leu
226		_	115		_	_		120	_	~-3		_	125	_		
229 230	Thr	Leu 130	Asp	Ala	Leu	Leu	GIu 135	Met	Asp	Glu	Ala	Lys 140	Ala	Lys	GIu	Met
	Leu 145	Arg	Arg	Trp	Gly	Ala 150	Ser	Thr	Glu	Glu	Cys 155	Ser	Arg	Leu	Gln	Gln 160
		Leu	Thr	Cvs	Leu	Arg	Lvs	Val	Thr	Glv		Glv	Glv	Glu	His	Lvs
238				_	165		_			170		_	_		175	_
241 242	Met	Asp	Ser	180	Trp	Ser	ser	Thr	185	Ala	Arg	Asp	ser	Ser 190	Leu	GIY
245	Pro	Pro	Met	Asp	Met	Leu	Ser	Ser	Leu	Gly	Arg	Ala	Gly	Ala	Ser	Thr
246			195					200					205			
249	Gln	Gly	${\tt Pro}$	Arg	Ser	Ile	Ser	Val	Ser	Ala	Leu	Pro	Ala	Ser	Asp	Ser
250		210					215					220				
253	Pro	Val	Pro	Gly	Leu	Ser	Glu	Gly	Leu	Ser	Asp	Ser	Cys	Ile	${\tt Pro}$	Leu
254	225					230					235					240
257	His	Thr	Ser	Gly	Arg	Leu	Thr	${\tt Pro}$	Arg	Ala	Leu	His	Ser	Phe	Ile	Thr
258					245					250					255	
261	Pro	Pro	Thr	Thr	Pro	Gln	Leu	Arg	Arg	His	Ala	Lys	Leu	Lys	Pro	Pro
262				260					265					270		
265	Arg	Thr	Pro	Pro	Pro	Pro	Ser	Arg	Lys	Val	Phe	Gln	Leu	Leu	${\tt Pro}$	Ser
266			275					280					285			
269	Phe	Pro	Thr	Leu	Thr	Arg	Ser	Lys	Ser	His	Glu	Ser	Gln	Leu	Gly	Asn
270		290					295					300				
273	Arg	Ile	Asp	Asp	Val	Thr		Met	Lys	Phe	Glu	Leu	Pro	His	Gly	Ser
	305					310					315					320
277	Pro	Gln	Leu	Val	Arg	Arg	Asp	Ile	Gly	Leu	Ser	Val	Thr	His	Arg	Phe
278					325					330					335	
	Ser	Thr	Lys		Trp	Leu	Ser	Gln		Cys	Asn	Val	Cys		Lys	Ser
282				340					345					350		
	Met	Ile		Gly	Val	Lys	Cys	-	His	Cys	Arg	Leu	_	Cys	His	Asn
286			355		_			360			_		365			
	Lys	_	Thr	Lys	Glu	Ala		Ala	Cys	Arg	Ile		Phe	Leu	Pro	Leu
290		370	_				375					380			_	_
293	Ala	Arg	Leu	Arg	Arg	Thr	Glu	Ser	Val	Pro	Ser	Asp	Ile	Asn	Asn	Pro
	385					390					395			_		400
	Val	Asp	Arg	Ala		Glu	Pro	His	Phe	_	Thr	Leu	Pro	Lys		Leu
298					405			_		410				_	415	_
	Thr	Lys	Lys		His	Pro	Pro	Ala		Asn	Leu	Asp	Ser		Ser	Asn
302	_	_	_	420	•	_	_		425			_		430	_,	_
	Pro	Ser		Thr	Thr	Ser	Ser		Pro	Ser	Ser	Pro		Pro	Phe	Leu
306	1	_	435	_	_	_		440	_,	_,	_	_	445	_	•	_
	Thr		Ser	Asn	Pro	Ser		Ala	Thr	Thr	Pro		Asn	Pro	ser	Pro
310	~ 7	450		•	<b>a</b> .	_	455	<b>a</b> .	<b>D</b> 1	_		460		<b>77</b> -	<b>~</b>	O
313	GIY	GIn	Arg	Asp	Ser	Arg	Phe	ser	Phe	Pro	Asp	ıте	ser	Ala	Cys	ser

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317	Gln	Ala	Ala	Pro	Leu	Ser	Ser	Thr	Ala	Asp	Ser	Thr	Arg	Leu	Asp	Asp
318					485					490					495	
321	Gln	Pro	Lys	Thr	Asp	Val	Leu	Gly	Val	His	Glu	Ala	Glu	Ala	Glu	Glu
322				500					505					510		
	Pro	Glu	Ala	Gly	Lys	Ser	Glu	Ala	Glu	Asp	Asp	Glu	Glu	Asp	Glu	Val
326			515					520					525			
329	Asp	Asp	Leu	Pro	Ser	Ser	Arg	Arg	Pro	Trp	Arg	Gly	Pro	Ile	Ser	Arg
330		530					535					540				
333	Lys	Ala	Ser	Gln	Thr		Val	Tyr	Leu	Gln		Trp	Asp	Ile	Pro	
	545					550	_			_	555				_	560
337	Glu	Gln	Val	Glu		Gly	Glu	Pro	Ile		Gln	Gly	Arg	Trp		Arg
338					565			_	_	570	_				575	
	Val	His	Arg		Arg	Trp	His	Gly		Val	Ala	Ile	Arg		Leu	Glu
342			_	580		_			585				_	590		<b>-</b>
	Met	Asp	_	His	Asn	Gln	Asp		Leu	Lys	Leu	Phe		Lys	GIu	Val
346			595				_	600		_			605	_,		
	Met		Tyr	Arg	Gln	Thr	Arg	His	Glu	Asn	Val		Leu	Phe	Met	GIY
350		610		_	_	_	615	_				620	<b>~</b>	D1	<b>G</b>	<b>T</b>
		Cys	Met	Asn	Pro		His	Leu	Ala	тте		Thr	ser	Pne	Cys	
	625	_		<b>.</b>	***	630	<b>5</b> 1	**- 7	3	<b>3</b>	635	T	ml	0	T	640
	GIY	Arg	Thr	Leu		ser	Phe	vaı	Arg	_	Pro	ьys	Thr	ser		Asp
358	-1.		<b>.</b>	ml	645	<b>~1</b>	<b>-1</b> -	27-	a1	650	*1.	T1.	T	<b>~1</b>	655 Mat	<b>C1</b>
	тте	Asn	ьуs		Arg	GIn	Ile	Ата		GIU	тте	Tre	гуѕ		Met	Gly
362	m	T 0	TT : -	660	T	<b>~1</b>	Ile	17a ]	665	T ***	7 00	T 011	Tvc	670	Tarc	Λcn
	ıyı	ьеu	675	міа	цуб	GIY	116	680	птэ	пуэ	Asp	пеп	685	Ser	цуз	ASII
366	v-1	Dho		λcn	7 cn	Gly	Lys		V-1	716	Thr.	λen		Glv	T. <b>-</b> 11	Dhe
370	vaı	690	ıyı	АЗР	ASII	Gry	695	vai	vai	116	1111	700	FIIC	Gry	пец	riic
	Glv		Sar	Glv	Val	Val	Arg	Glu	Glu	Δτα	Ara		Δsn	Gln	Len	Lvs
	705	110	Jer	Gry	vai	710	nr 9	Olu	Olu	n-9	715	Olu	71011	01	200	720
		Ser	His	Asp	Trn		Cys	Tvr	Len	Ala		Glu	Ile	Val	Ara	
378	<b></b>	001			725		C <sub>J</sub> C	-1-		730		010			735	
	Met.	Ile	Pro	Glv	. — -	Asp	Glu	Asp	Gln		Pro	Phe	Ser	Lvs	Ala	Ala
382				740	5				745					750		
	Asp	Val	Tvr		Phe	Gly	Thr	Val	Trp	Tyr	Glu	Leu	Gln	Ala	Arq	Asp
386			755			2		760					765		_	•
389	Trp	Pro	Phe	Lys	His	Gln	Pro	Ala	Glu	Ala	Leu	Ile	Trp	Gln	Ile	Gly
390	•	770		-			775					780	_			_
	Ser	Gly	Glu	Gly	Val	Arg	Arg	Val	Leu	Ala	Ser	Val	Ser	Leu	Gly	Lys
	785	-		-		790	_				795					800
		Val	Gly	Glu	Ile	Leu	Ser	Ala	Cys	Trp	Ala	Phe	Asp	Leu	Gln	Glu
398			_		805					810					815	
401	Arg	Pro	Ser	Phe	Ser	Leu	Leu	Met	Asp	Met	Leu	Glu	Arg	Leu	Pro	Lys
402	_			820					825					830		
405	Leu	Asn	Arg	Arg	Leu	Ser	His	Pro	Gly	His	Phe	Trp	Lys	Ser	Ala	Asp
406			835					840					845			
409	Ile	Asn	Ser	Ser	Lys	Val	Met	Pro	Arg	Phe	Glu	Arg	Phe	Gly	Leu	Gly
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VERIFICATION SUMMARYDATE: 01/10/2006PATENT APPLICATION: US/10/516,342TIME: 08:40:51

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